In some cases some external influence falling on some spot of the embryo seems to determine an axis of development, initiating at that spot some form of metabolism which propagates itself with diminishing intensity along an axis or line within the organism, about which axis other organizing processes later set in.

The facts are of unquestionable interest and make an important step in the description of the embryo's development. But they do not go very far towards explanation. Rather they themselves constitute a new problem.

As to the organizers, the name and the facts seem to have suggested to some biologists that here at last was the solution of the great problem of morphogenesis—namely, the organizers do it. For it was shown that certain minute bits of tissue from a certain region of one embryo, transplanted into various positions in younger embryos, may induce or initiate there organizing processes of an elaborate kind which would not have occurred without the presence of the organizers. For example, a secondary organism, a sort of Siamese twin, may result—to take an extreme instance. Or to take a less extreme and more familiar example, a bit of developing eyeball transplanted to some remote part of the skin (say, of the middle of the back) may induce that skin to form a refracting medium over the developing eyeball tissue, as occurs in the normal position of the eye.

These two lines of research and new knowledge are closely allied; for ' the organizer' seems to initiate a

physiological gradient. However we regard these facts, they are of extreme interest. But their bearing on the riddle of life is by no means clear. Two opposite views are possible. The one accepted by Needham is that they constitute a considerable step towards the justification of